

HOW TO USE YOUR

**KENMORE**

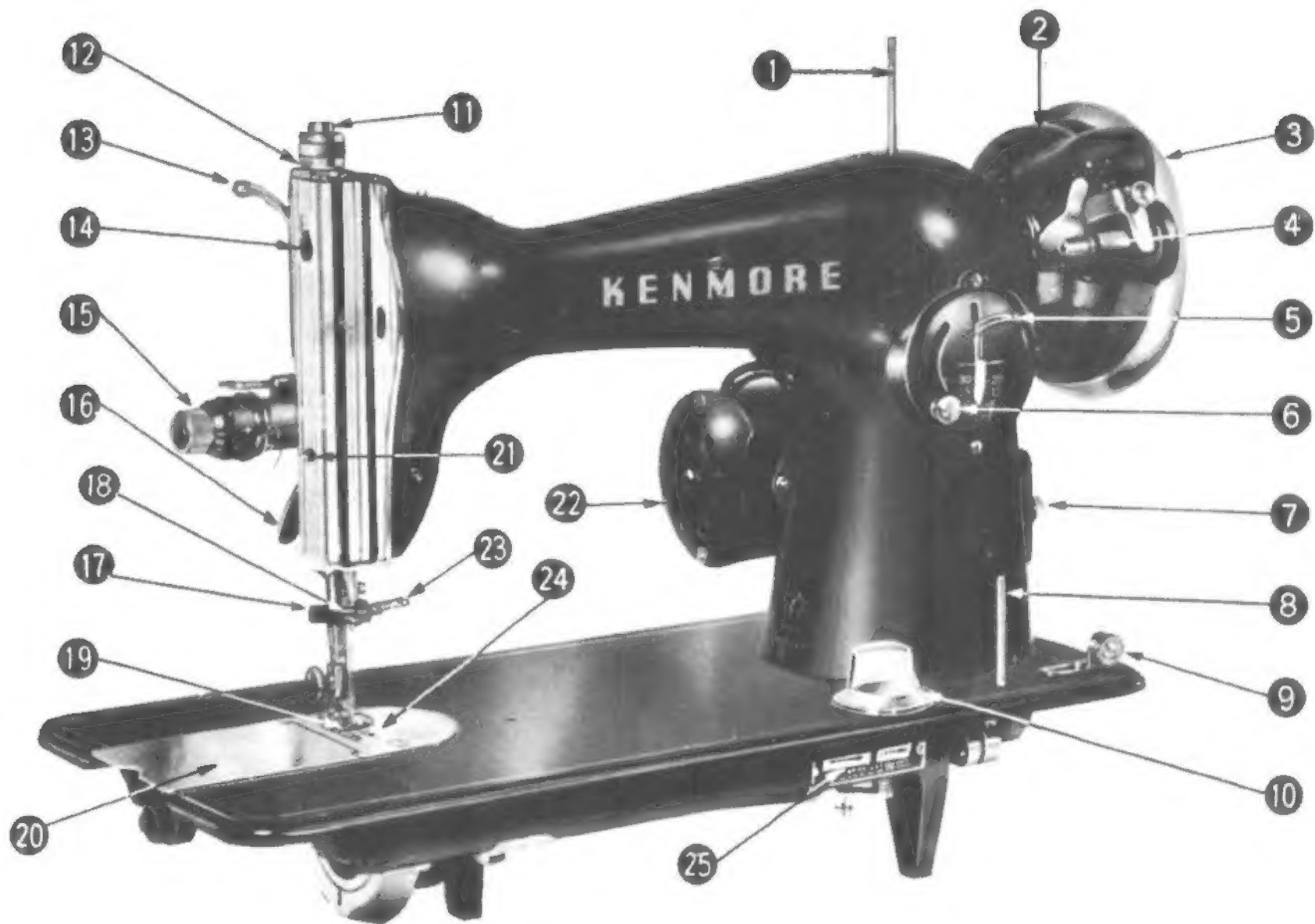
SEWING MACHINE

MODEL

27

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## HEAD PARTS IDENTIFICATION

- |   |                                  |
|---|----------------------------------|
| 1. Thread Spool Post                            | 13. Thread Take-Up Lever         |
| 2. Belt Guard                                   | 14. Face Plate                   |
| 3. Hand Wheel                                   | 15. Upper Thread Tension Control |
| 4. Bobbin Winder                                | 16. Presser Foot Lever           |
| 5. Stitch Length Control                        | 17. Thread Cutter                |
| 6. Stitch Length Control Lock                   | 18. Needle Clamp Thread Guide    |
| 7. Motor Mount Bracket and Screw                | 19. Presser Foot                 |
| 8. Bobbin Winder Thread Spool Post              | 20. Cover Plate                  |
| 9. Bobbin Winder Thread Guide                   | 21. Thread Guide                 |
| 10. "Drop Feed" Control                         | 22. Motor                        |
| 11. Darner (Pressure Regulator for Presser Bar) | 23. Needle Clamp Screw           |
| 12. Top Thread Guide                            | 24. Needle Plate                 |
|   | 25. Nomenclature Plate           |



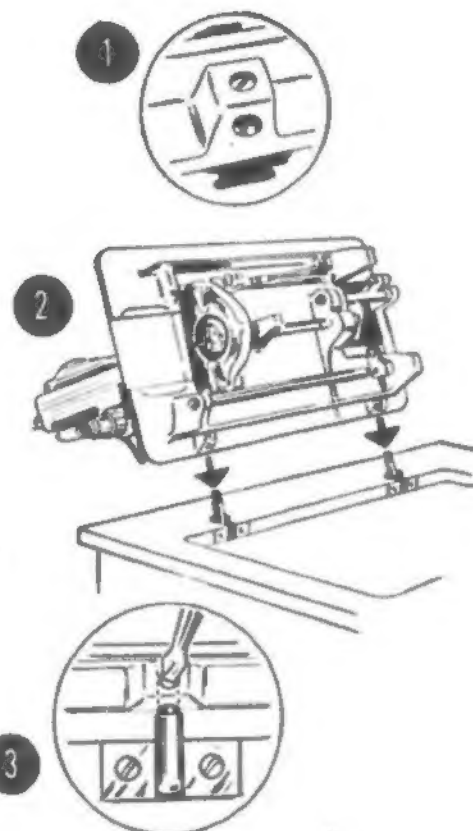
## INSTALLING MACHINE HEAD IN PORTABLE AND CABINET

Loosen the two hinge screws under holes in the rear edge of the machine bed (1).

Raise hinge pins in the cutout (2).

Slip machine head onto the pins and tighten hinge screws securely (3)

Lower machine head to front flap.



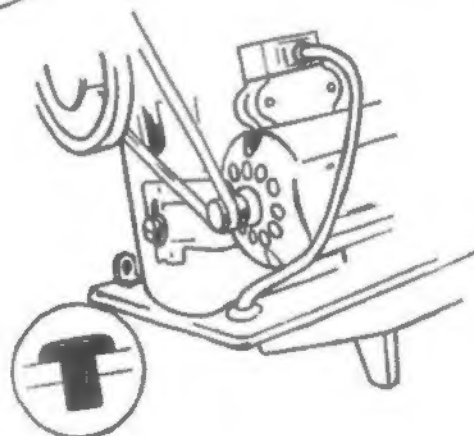
## NEEDLE SIZE

Use Kenmore 6021 needles. The size of the needle should conform to the size of the thread and both should be suitable to the material. The same size thread should be used in the bobbin as on the upper part of the machine for ordinary sewing.

Never use a bent needle nor one with a blunt point.

## CONNECTING MACHINE

Push plug onto three prong connector over the machine motor. Plug machine cord into any 110-120V wall outlet. When installed in cabinet, insert grommet with cord in hole in bedplate.

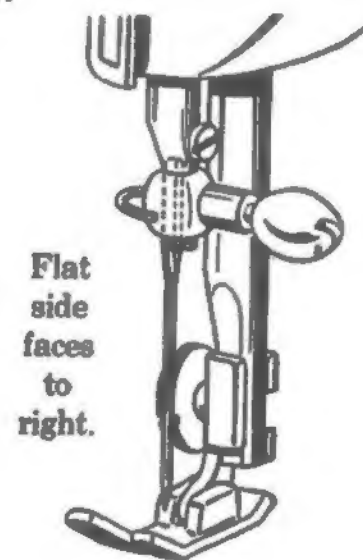


## NEEDLE AND THREAD TABLE

THREAD SIZE	NEEDLE SIZE	FABRIC
Cotton 80-100 Nylon A Silk A Machine embroidery	11	Sheercottons, silks, and synthetics Fine Laces
Cotton 60-80 Mercerized 50 Nylon A Silk A Machine embroidery	14	Light to medium weight cottons Light to medium weight silks Medium weight synthetics Light weight woolens
Cotton, 40-60 Mercerized 50 Mercerized heavy duty	16	Heavy weight cottons Medium to heavy weight woolens Heavy drapery fabrics
Cotton 30-50 Mercerized heavy duty	18	Heaviest cottons as for men's work clothes Heaviest woolen coating

## PLACEMENT OF NEEDLE

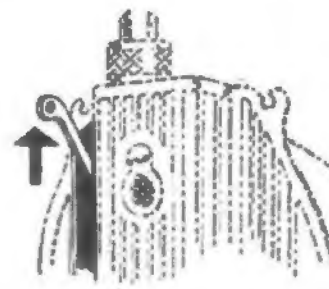
Raise take-up lever to its highest position by turning hand wheel toward you. Loosen needle clamp screw. Hold needle so that the flat side is to your right, slip blunt end of needle as far as it will go into needle clamp. Tighten needle into place with clamp screw.



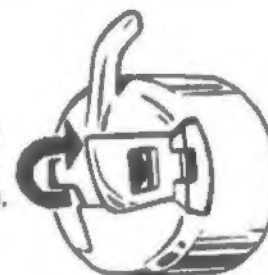
## REMOVING BOBBIN CASE FROM SHUTTLE



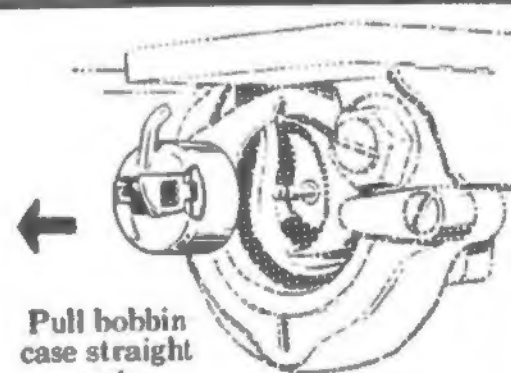
Take up  
lever  
at its  
highest  
position.



Pull  
out  
latch.



Pull bobbin  
case straight  
out.

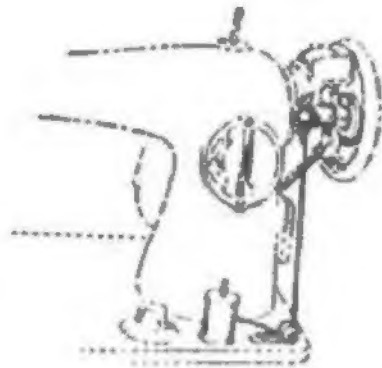




## WINDING THE BOBBIN

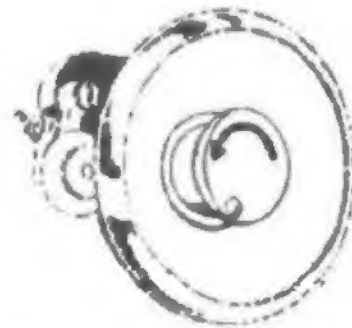
1

Place thread on spool post. Draw thread under bobbin winder thread guide.



4

Disengage hand wheel by turning inner knob toward you.



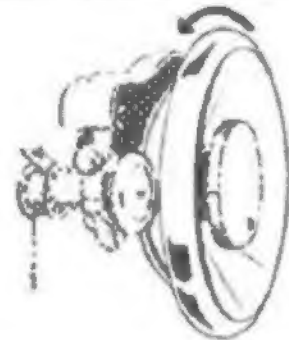
2

Wind thread around bobbin a few times, front to back. Guide bobbin onto bobbin winder shaft.



5

Start machine. When bobbin is full, winding mechanism stops automatically.



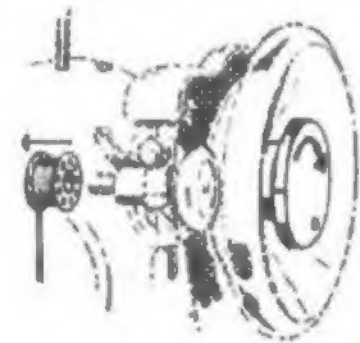
3

Press bobbin winder lever down.



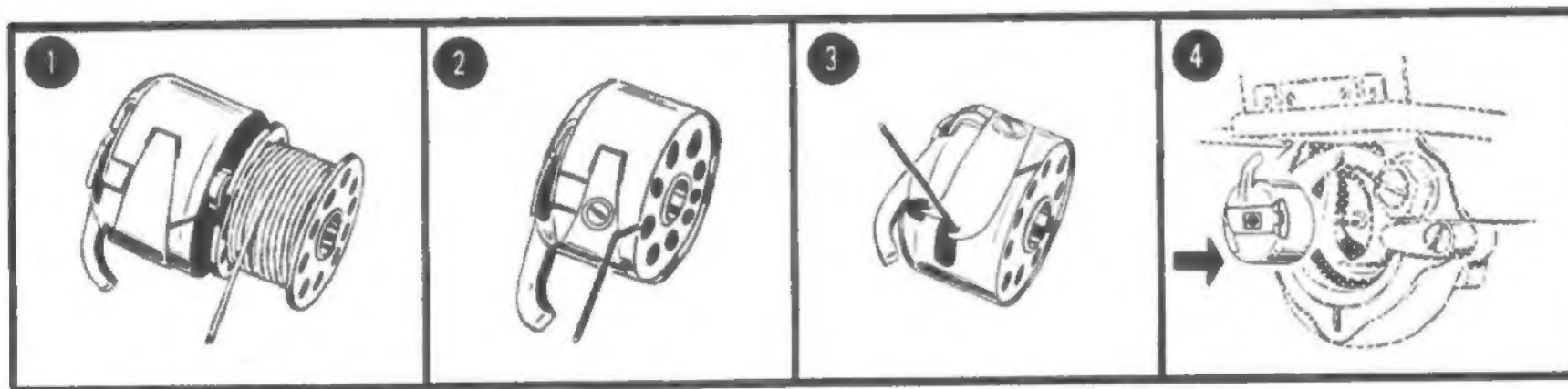
6

Tighten hand wheel and remove bobbin.

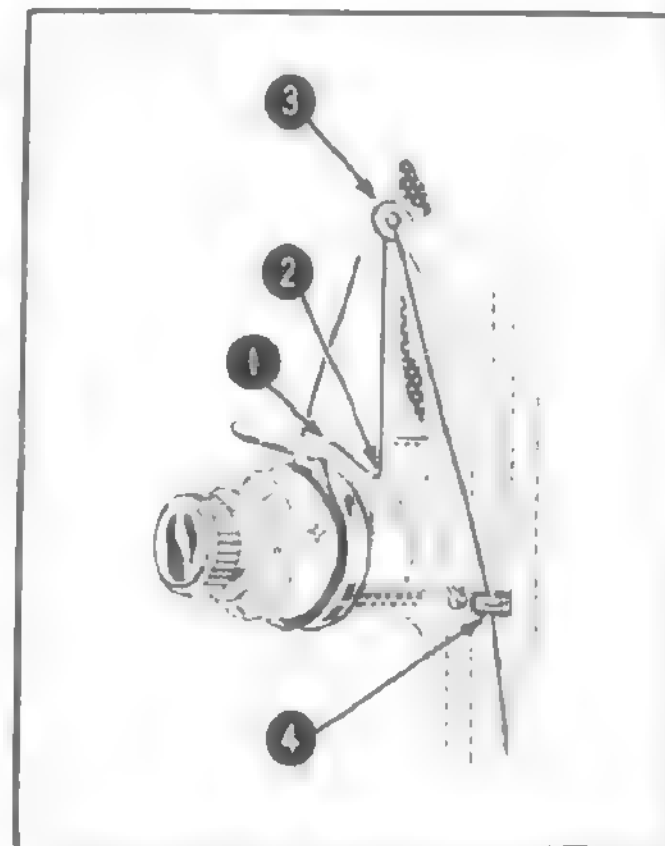
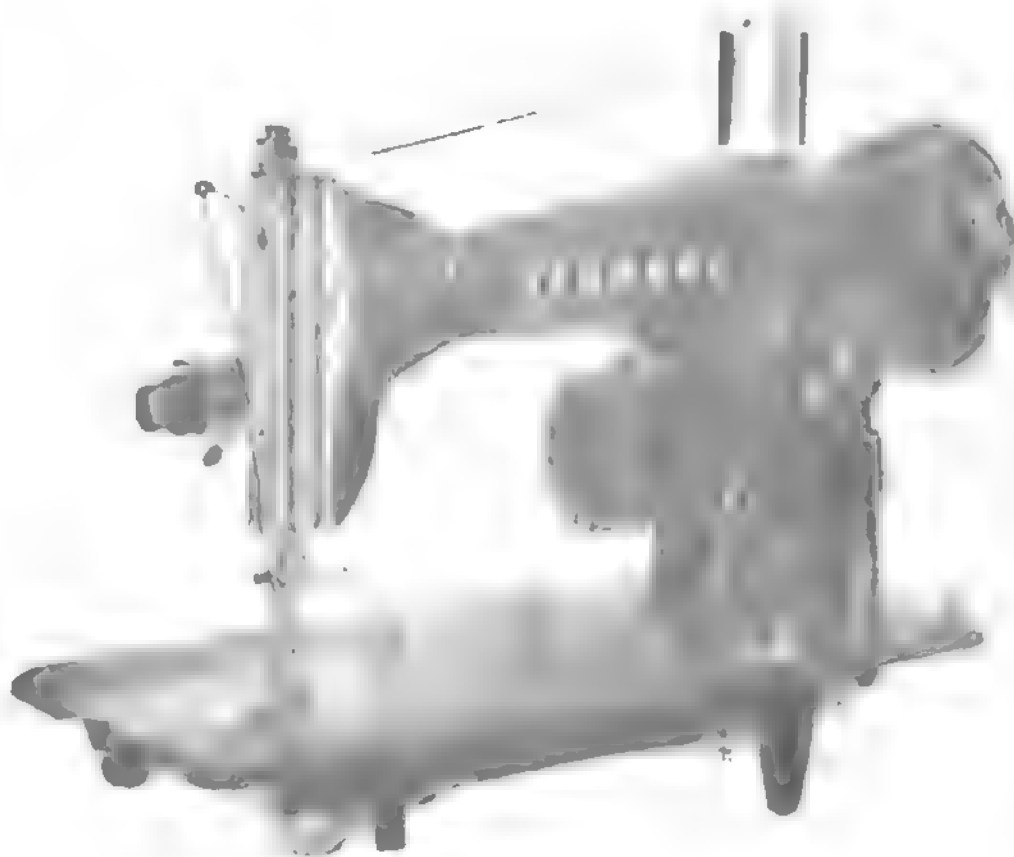


## INSERTING BOBBIN INTO BOBBIN CASE...CASE INTO SHUTTLE

- 1 Guide bobbin onto center pin of bobbin case.
- 2 Pull thread through slot.
- 3 Pull thread under tension spring.
- 4 Holding latch, position case into shuttle, then release latch.



## THREADING UPPER MACHINE



## PICKING UP BOBBIN THREAD

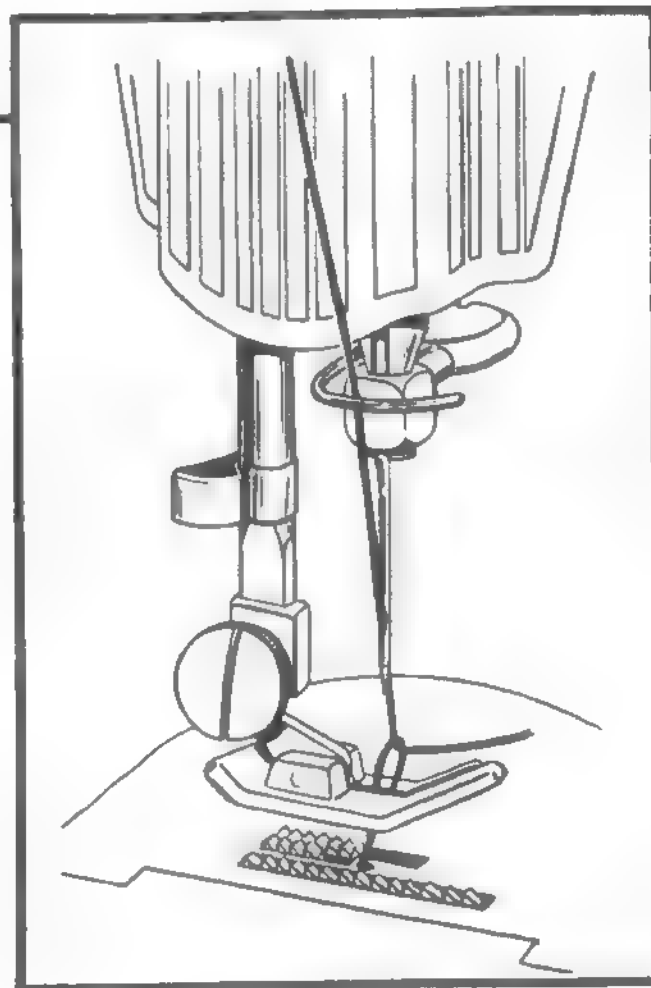
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Raise presser foot lever.

Hold needle thread loosely in left hand and rotate hand wheel toward you one complete turn.

Bring bobbin thread up by pulling upper thread. (See illustration).

Place threads back under presser foot.

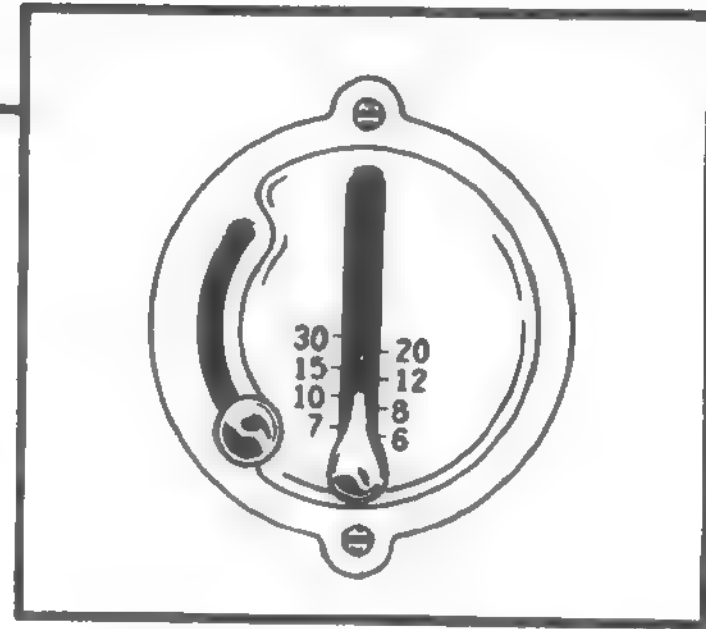


## REGULATING LENGTH OF STITCH

The machine can be adjusted to produce from 6 to 30 stitches per inch, as indicated by the numbers on the stitch indicator plate. Number 6 is the longest stitch, number 30, the shortest. (See illustration).

Loosen thumb screw and move it to the bottom of the slot provided. Move the stitch regulator lever to the number of desired stitches.

Move thumb screw upward until the stitch regulator plate is touching the stitch regulator lever. Retighten the thumb screw.



### RECOMMENDED STITCH LENGTHS

- 15-20 For Finest Silks and Sheers
- 12-15 For Most Light Weight Fabrics
- 10-12 For Medium Weight Fabrics
- 8 For Heavy Weight Fabrics
- 6 For Basting and Gathering

# ADJUSTING TENSIONS

1



Fig. 1

A perfect stitch will have threads locked between the two layers of fabric with no loops on top or bottom.

## PROBLEM

## REMEDY

2

Upper thread too tight



Fig. 2



Decrease Tension



3

Upper thread too loose



Fig. 3



Increase Tension



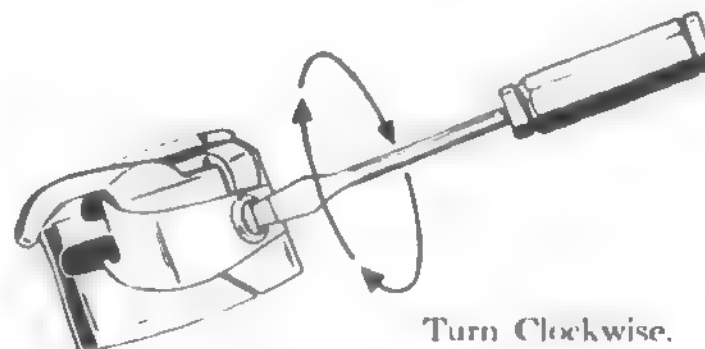


When stitching is unsatisfactory as in figures 2 and 3, adjust the upper thread tension. Lower thread tension is preset and rarely requires adjustment for general sewing.

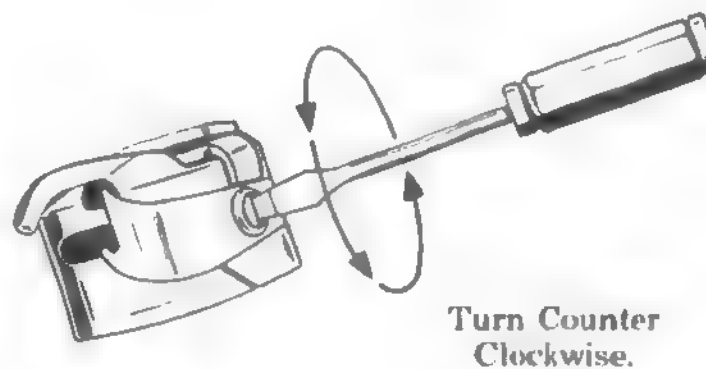
However, if stitch is satisfactory, as in figure 1 and seam is badly puckered, the cause may be tight tensions and both upper and lower may be adjusted (see page 20).

When adjusting the tension on the bobbin case, make slight adjustments with a screwdriver.

#### INCREASE TENSION



#### DECREASE TENSION



## STARTING TO SEW

When machine is threaded, do not operate it without having material under the presser foot.

Place material under presser foot, lower presser foot lever. Insert needle into material by turning hand wheel toward you. As the material feeds automatically, it is sufficient merely to guide the fabric gently by hand. Do not try to help the feeding of the work by pulling the material as this may bend the needle.

## REMOVING WORK

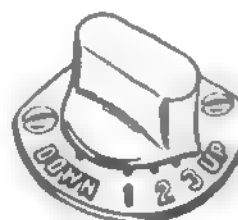
Be sure take-up lever is at its highest position. Raise presser foot and pull fabric to back. Be sure upper thread is in presser foot slot to avoid bending needle. Pass

threads over thread cutter, pulling down slightly.

## TURNING A CORNER

Stop your sewing machine and make sure needle is in fabric. Raise presser foot. Turn fabric to desired direction. Lower presser foot and go on with your stitching.

## DROP FEED CONTROL



When knob is in the *down* position, feed dog does not move material. This allows the operator freedom of movement of material. For regular sewing, turn knob to *up* position.

## **BASTING**

For accomplishing quicker, more even and firmer basting, we suggest you regulate the machine in the following manner: Set stitch indicator at No. 6 for the longest possible stitch. Basting is easily removed by pulling bottom thread.

## **REVERSE STITCHING**

To sew in reverse, stop sewing, move stitch regulator lever up until it stops. Reverse stitching will be the same size as forward stitching.

## **FASTENING A SEAM**

The following method of fastening a seam is often called "back tacking."

Lower needle into fabric  $\frac{1}{2}$  inch from beginning of seam.

Lower presser foot.

Raise stitch regulator lever up until it stops. Stitch in reverse until needle reaches beginning of seam.

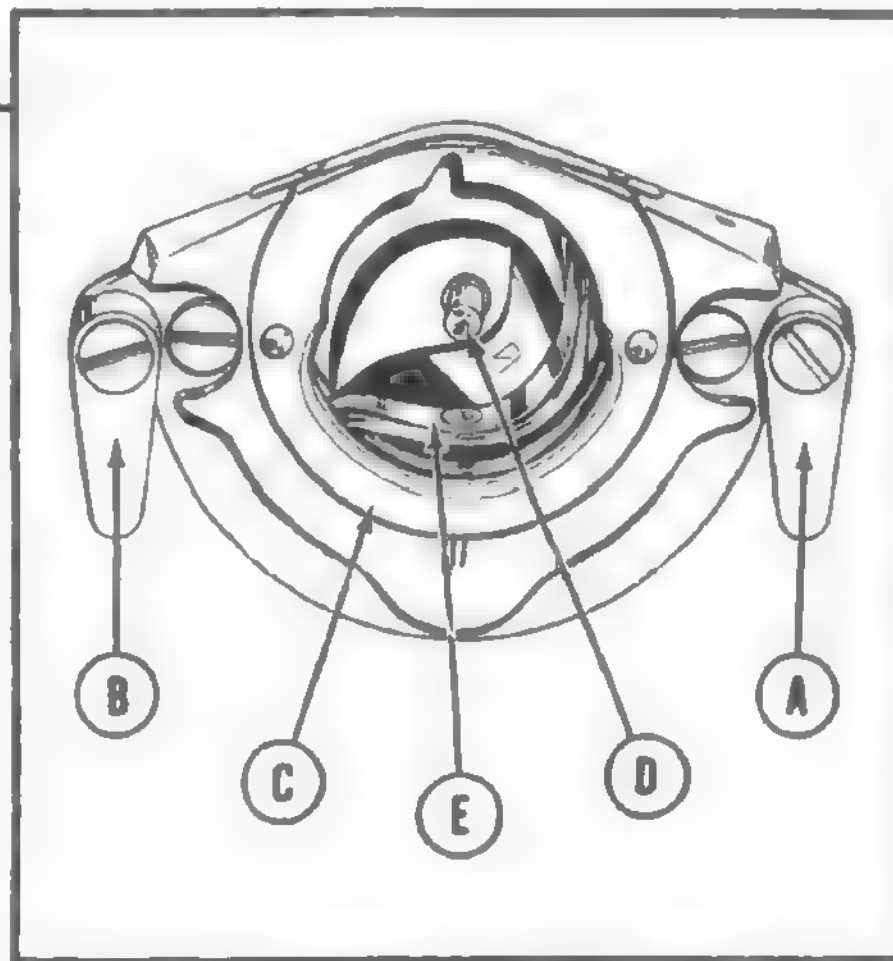
Lower stitch regulator lever and complete seam.

When end of seam is reached, sew in reverse  $\frac{1}{2}$  inch.

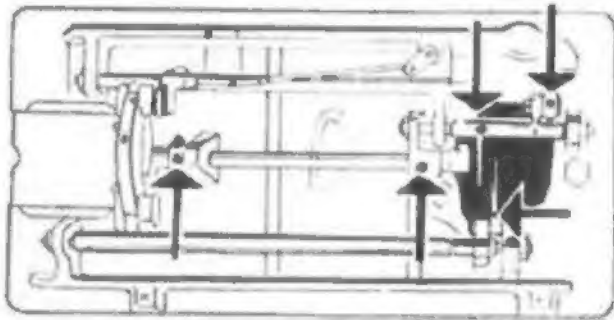
Remove material and cut thread on cutter.

## REMOVING LINT

1. Turn hand wheel toward you until needle is at its highest position. Remove bobbin and bobbin case.
2. Turn knob (A) one-half turn toward you. Turn knob (B) one-half turn away from you.
3. Remove shuttle race cover (C). Then remove shuttle (D) by grasping axle.
4. Remove accumulated lint and thread from all parts.
5. Replace shuttle in race body, with axle facing out, forming a perfect circle with driver (E).
6. Replace shuttle race cover (C), polished side out, so that both lugs are under knobs (A) and (B).
7. Replace bobbin and bobbin case.
8. *Do not attempt to force any of the above operation.*



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**Tilt machine head back to oil points indicated on under side of machine head.**



**Oil machine at points indicated. Use only one drop of oil at each point. Moderate use requires only periodic oiling.**

## WHAT TO DO

PROBLEM	PROBABLE CAUSE	CORRECTION
Irregular Stitches	<p>Incorrect size needle.                      Improper threading.                      Loose upper thread tension.                      Pulling fabric.                      Light pressure on presser foot.                      Loose presser foot.                      Unevenly wound bobbin.</p>	<p>Choose correct size needle for thread and fabric (page 5).                      Rethread machine (page 9).                      Tighten upper thread tension (page 12).                      Do not pull fabric; guide it gently.                      Increase pressure on presser foot.                      Tighten presser foot screw.                      Rewind bobbin (page 7).</p>
Breaking Needles	<p>Pulling fabric.                      Incorrect size needle.                      Incorrect setting of needle                      Loose presser foot.</p>	<p>Do not pull fabric; guide it gently.                      Choose correct size needle for thread and fabric (page 5).                      Reset needle (page 5).                      Tighten presser foot screw.</p>
Bunching of Thread	<p>Upper and lower threads not drawn back under presser foot.                      Feed dog down.</p>	<p>Draw both threads back under presser foot (page 10).                      Raise feed dog (page 14).</p>
Puckering	<p>Incorrect thread tension(s).                      Light pressure on presser foot.                      Using two different sizes or kinds of thread.                      Bent or blunt needle.                      Loose presser foot.                      Fabric too sheer or too soft.</p>	<p>Reset thread tension(s) (page 12, 13 &amp; 20).                      Increase pressure on presser foot.                      Upper thread and bobbin thread should be same size and kind.                      Insert new needle (page 5).                      Tighten presser foot screw.                      Use underlay of tissue paper or teflon when stitching.</p>



## WHAT TO DO

PROBLEM	PROBABLE CAUSE	CORRECTION
Skipping Stitches	Incorrect size needle. Bent or blunt needle. Incorrect setting of needle. Tight upper thread tension. Light pressure on presser foot.	Choose correct size needle for thread and fabric (page 5). Insert new needle (page 5). Reset needle (page 5). Loosen upper thread tension (page 12). Increase pressure on presser foot.
Breaking Upper Thread	Starting to stitch too fast. Improper threading. Tight upper thread tension. Incorrect size needle. Sharp eye in needle.	Start to stitch at a medium speed. Rethread machine (page 9). Loosen upper thread tension (page 12). Choose correct size needle for thread and fabric (page 5). Insert new needle (page 5).
Breaking Bobbin Thread	Improper bobbin case threading. Tight bobbin thread tension. Lint in bobbin case or shuttle.	Check bobbin case threading (page 8). Loosen bobbin thread tension (page 13). Clean bobbin case and shuttle (page 16).
Fabric not Moving	Feed dog down. Light pressure on presser foot. Threads knotted under fabric.	Raise feed dog (page 14). Increase pressure on presser foot. Place both threads back under presser foot before beginning to stitch.
Machine Jamming (Knocking Noise)	Thread caught in shuttle.	Disassemble and clean shuttle (page 16).

## ADJUSTING YOUR SEWING MACHINE FOR GOOD STITCHES

When your sewing machine does not sew a properly locked stitch, check the following :

1. Insert a new needle of the correct size for the thread and fabric you are using. Check your machine instruction book at page 5 for needle size.
2. The upper and bobbin thread should be matched in size and type.
3. Check threading carefully. (See page 8 & 9)
4. Check the thread tension balance.  
Use # 50 mercerized thread, size # 14 needle, and a firm cotton fabric.  
Begin with a full bobbin, properly threaded into the case. Set the stitch length at about 12 stitches per inch. Make a row of bias stitching on a double thickness of your fabric.

If seam is puckered — both tensions are too tight.

If bottom thread is looped — tighten upper thread tension.

If top thread lays on top of fabric —loosen upper thread tension.

Then grasp a good bias seam and pull evenly and firmly until one or both threads break.

If both threads break — tensions are balanced.

If neither thread breaks — both tensions are too loose.

If upper thread breaks—loosen upper tension.

If lower thread breaks—tighten upper tension.

Bobbin tension may also be reset by this procedure. Start with a loose bobbin thread tension. Tighten the spring screw gradually until bobbin case and full bobbin can be gently lifted from your hand by the end of the thread.